APPENDIX (III)

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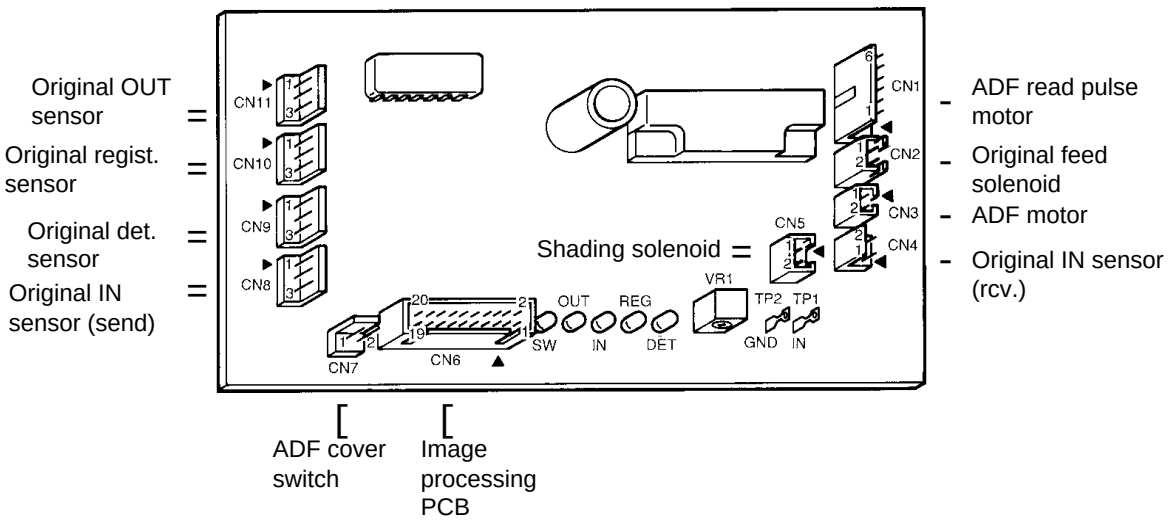
2. Integral Circuit Diagrams

1. Integral Circuit Diagram (RA4200)
2. Integral Circuit Diagram (RA4900)
3. Integral Circuit Diagram (RA5900)

13. ADF PCB



VR

VR1 : For sensitivity adjustment of Original IN sensor (receive)

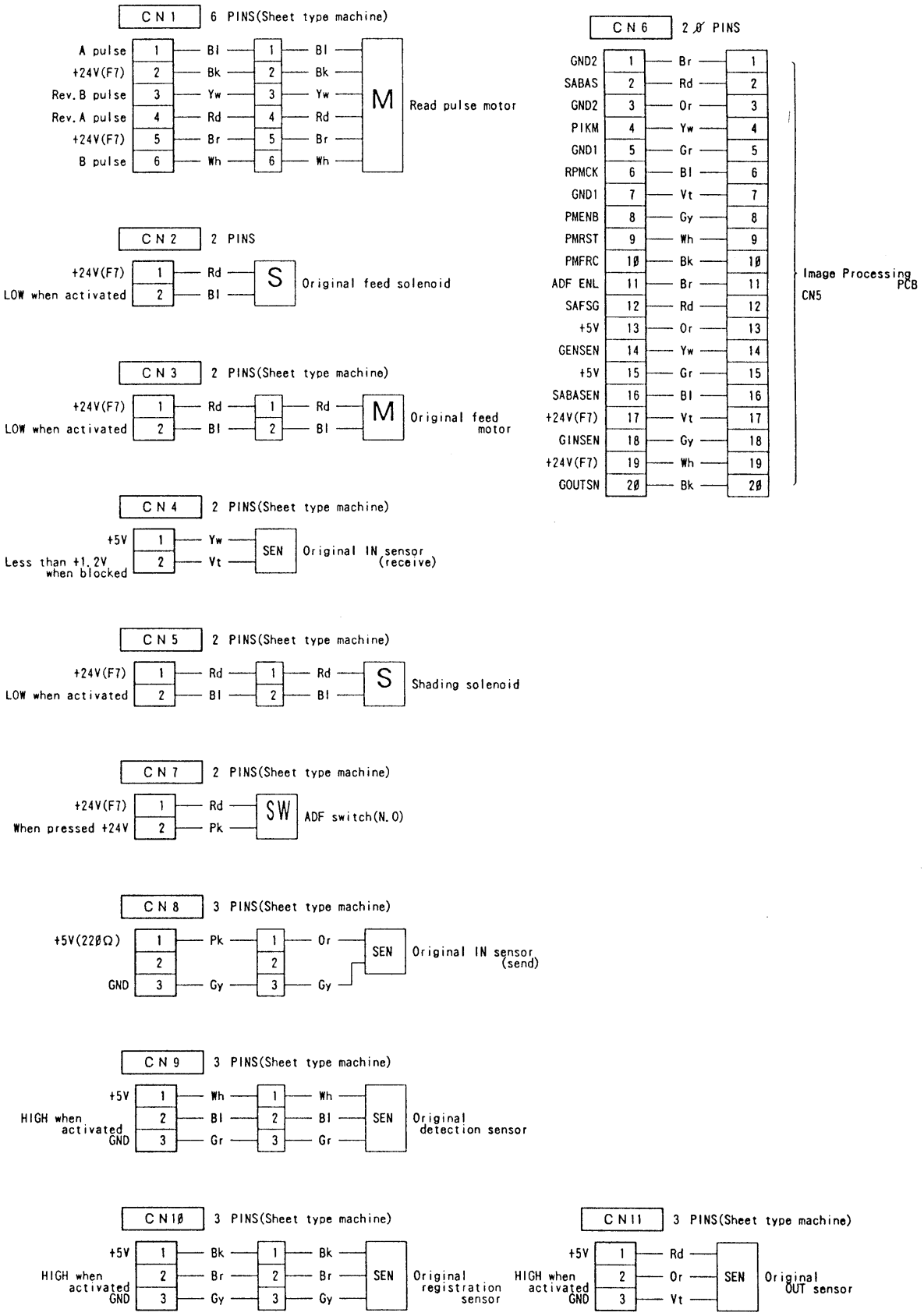
LED **- When LED is ON -**

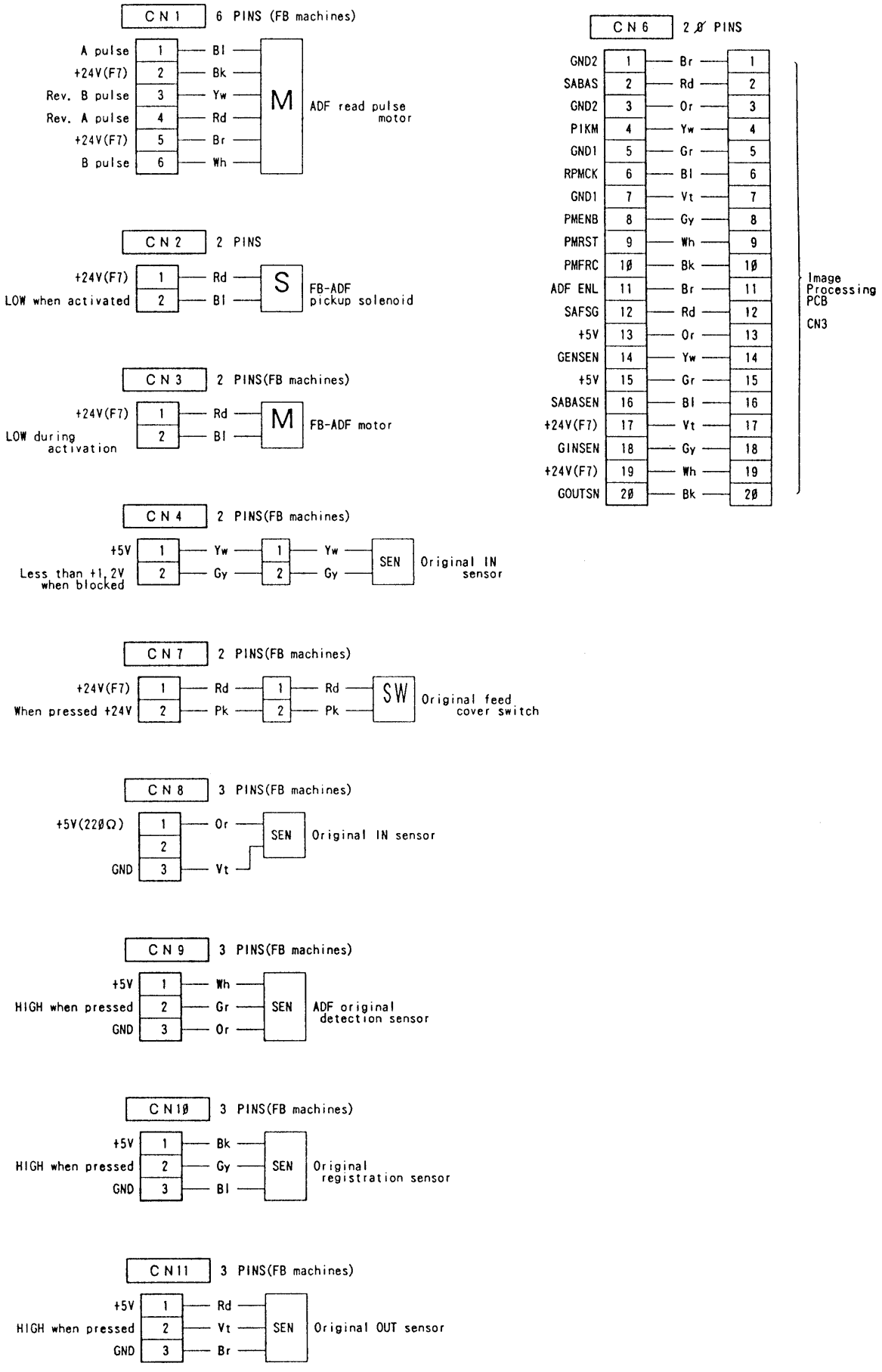
D4 (DET) : The actuator of Original detection sensor is raised to open the light path.
D5 (REG) : The actuator of Original registration sensor is raised to open the light path.
D6 (IN) : The light path of the Original IN sensor is blocked.
D7 (OUT) : The actuator of Original OUT sensor is raised to open the light path.
D8 (SW) : The ADF cover switch is pressed.

Note: LED's, "D4, D5, D7, and D8" are omitted from new ADF PCB, i.e. 017-51000-100. Only "D6 (IN)" is found on the new ADF PCB.

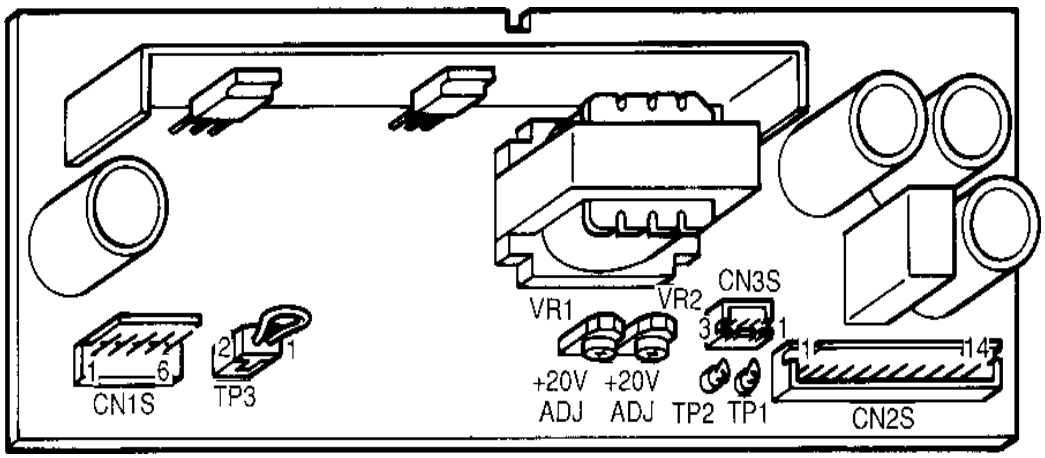
TP

TP1 (IN) : For sensitivity adjustment of Original IN sensor
TP2 (GND) : For sensitivity adjustment of Original IN sensor


CN1
6 PINS(Sheet type machine)
A pulse
+24V(F7)
Rev.B pulse
Rev.A pulse
+24V(F7)
B pulse
Read pulse motor
CN2
2 PINS
+24V(F7)
LOW when activated
Original feed solenoid
CN3
2 PINS(Sheet type machine)
+24V(F7)
LOW when activated
Original feed motor
CN4
2 PINS(Sheet type machine)
+5V
Less than +1.2V when blocked
Original IN sensor (receive)
CN5
2 PINS(Sheet type machine)
+24V(F7)
LOW when activated
Shading solenoid
CN7
2 PINS(Sheet type machine)
+24V(F7)
When pressed +24V
ADF switch(N.O)
CN8
3 PINS(Sheet type machine)
+5V(220Ω)
GND
Original IN sensor (send)
CN9
3 PINS(Sheet type machine)
+5V
HIGH when activated
GND
Original detection sensor
CN10
3 PINS(Sheet type machine)
+5V
HIGH when activated
GND
Original registration sensor
CN6
2Ø PINS
GND2
SABAS
GND2
PIKM
GND1
RPMCK
GND1
PMENB
PMRST
PMFRC
ADF ENL
SAFSG
+5V
GENSEN
+5V
SABASEN
+24V(F7)
GINSEN
+24V(F7)
GOUTSN
Image Processing PCB
CN5
CN11
3 PINS(Sheet type machine)
+5V
HIGH when activated
GND
Original OUT sensor

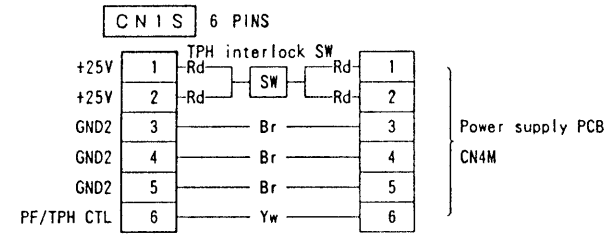

CN1
6 PINS (FB machines)
A pulse 1 Bl
+24V(F7) 2 Bk
Rev. B pulse 3 Yw
Rev. A pulse 4 Rd
+24V(F7) 5 Br
B pulse 6 Wh
M
ADF read pulse motor
CN2
2 PINS
+24V(F7) 1 Rd
LOW when activated 2 Bl
S
FB-ADF pickup solenoid
CN3
2 PINS(FB machines)
+24V(F7) 1 Rd
LOW during activation 2 Bl
M
FB-ADF motor
CN4
2 PINS(FB machines)
+5V 1 Yw
Less than +1.2V when blocked 2 Gy
1 Yw
2 Gy
SEN
Original IN sensor
CN7
2 PINS(FB machines)
+24V(F7) 1 Rd
When pressed +24V 2 Pk
1 Rd
2 Pk
SW
Original feed cover switch
CN8
3 PINS(FB machines)
+5V(220Ω) 1 Or
2
GND 3 Vt
SEN
Original IN sensor
CN9
3 PINS(FB machines)
+5V 1 Wh
HIGH when pressed 2 Gr
GND 3 Or
SEN
ADF original detection sensor
CN10
3 PINS(FB machines)
+5V 1 Bk
HIGH when pressed 2 Gy
GND 3 Bl
SEN
Original registration sensor
CN11
3 PINS(FB machines)
+5V 1 Rd
HIGH when pressed 2 Vt
GND 3 Br
SEN
Original OUT sensor
CN6
20 PINS
GND2 1 Br 1
SABAS 2 Rd 2
GND2 3 Or 3
PIKM 4 Yw 4
GND1 5 Gr 5
RPMCK 6 Bl 6
GND1 7 Vt 7
PMENB 8 Gy 8
PMRST 9 Wh 9
PMFRC 10 Bk 10
ADF ENL 11 Br 11
SAFSG 12 Rd 12
+5V 13 Or 13
GENSEN 14 Yw 14
+5V 15 Gr 15
SABASEN 16 Bl 16
+24V(F7) 17 Vt 17
GINSEN 18 Gy 18
+24V(F7) 19 Wh 19
GOUTSN 20 Bk 20
Image Processing PCB
CN3

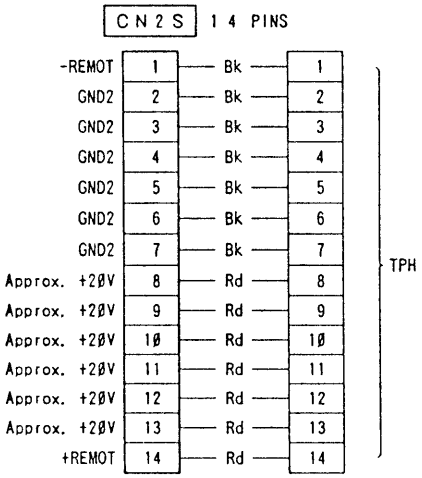
14. TPH Power PCB

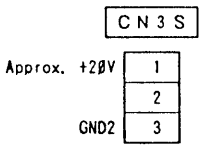


TP

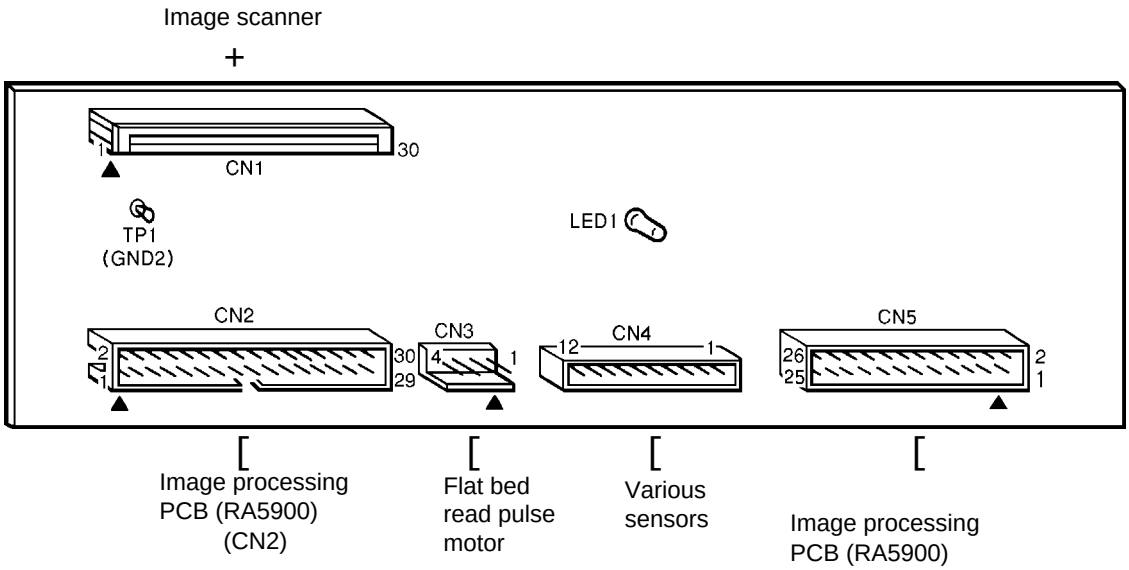
TP1 : +20±3V
TP2 : GND
TP3 : TPH Input Voltage (disconnected when adjusting TPH power).


CN1S 6 PINS
TPH interlock SW
+25V
+25V
GND2
GND2
GND2
PF/TPH CTL
Rd
Rd
SW
Rd
Rd
Br
Br
Br
Yw
Power supply PCB
CN4M


CN2S 14 PINS
-REMOT
GND2
GND2
GND2
GND2
GND2
GND2
Approx. +2ØV
Approx. +2ØV
Approx. +2ØV
Approx. +2ØV
Approx. +2ØV
Approx. +2ØV
+REMOT
Bk
Rd
TPH


CN3S
Approx. +2ØV
GND2

15. Flat Bed PCB (RA5900)

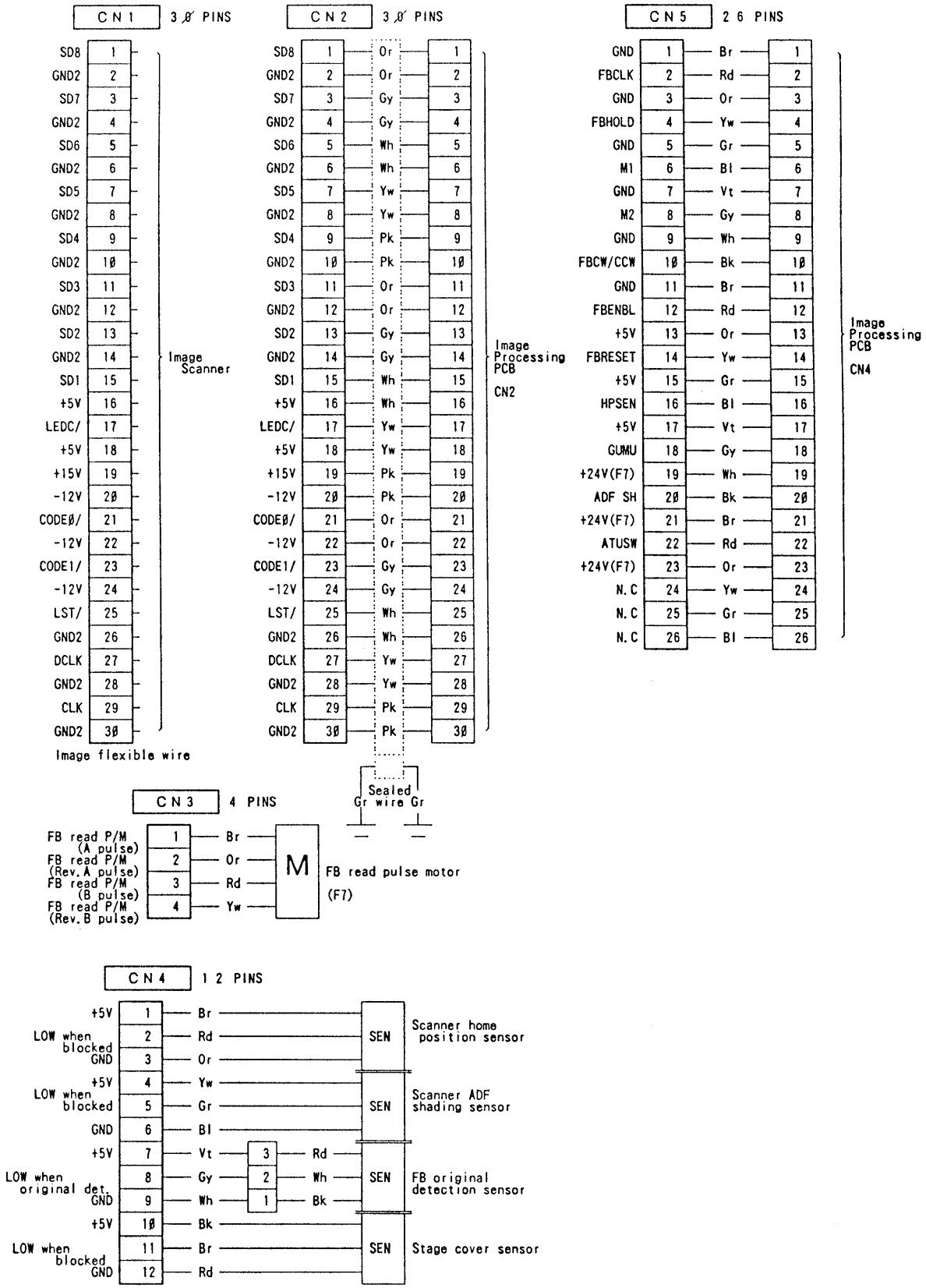


LED **- When LED is ON -**

LED 1 : The Flat bed original detection senosr is detecting an original. (The sensor is detecting the reflected light)

TP

TP1 : GND 2


CN1 30 PINS
SD8 1
GND2 2
SD7 3
GND2 4
SD6 5
GND2 6
SD5 7
GND2 8
SD4 9
GND2 10
SD3 11
GND2 12
SD2 13
GND2 14
SD1 15
+5V 16
LEDC/ 17
+5V 18
+15V 19
-12V 20
CODE0/ 21
-12V 22
CODE1/ 23
-12V 24
LST/ 25
GND2 26
DCLK 27
GND2 28
CLK 29
GND2 30
Image Scanner
Image flexible wire
CN2 30 PINS
Or Gy Gy Wh Wh Yw Yw Pk Pk Or Or Gy Gy Wh Wh Yw Yw Pk Pk Or Or Gy Gy Wh Wh Yw Yw Pk Pk
Image Processing PCB CN2
Sealed wire
Gr Gr
CN5 26 PINS
GND 1 Br 1
FBCLK 2 Rd 2
GND 3 Or 3
FBHOLD 4 Yw 4
GND 5 Gr 5
M1 6 Bl 6
GND 7 Vt 7
M2 8 Gy 8
GND 9 Wh 9
FBCW/CCW 10 Bk 10
GND 11 Br 11
FBENBL 12 Rd 12
+5V 13 Or 13
FBRESET 14 Yw 14
+5V 15 Gr 15
HPSEN 16 Bl 16
+5V 17 Vt 17
GUMU 18 Gy 18
+24V(F7) 19 Wh 19
ADF SH 20 Bk 20
+24V(F7) 21 Br 21
ATUSW 22 Rd 22
+24V(F7) 23 Or 23
N.C 24 Yw 24
N.C 25 Gr 25
N.C 26 Bl 26
Image Processing PCB CN4
CN3 4 PINS
FB read P/M (A pulse) 1 Br
FB read P/M (Rev. A pulse) 2 Or
FB read P/M (B pulse) 3 Rd
FB read P/M (Rev. B pulse) 4 Yw
M
FB read pulse motor (F7)
CN4 12 PINS
+5V 1 Br
LOW when blocked GND 2 Rd 3 Or
SEN Scanner home position sensor
+5V 4 Yw
LOW when blocked 5 Gr
GND 6 Bl
SEN Scanner ADF shading sensor
+5V 7 Vt
LOW when original det. 8 Gy
GND 9 Wh
3 Rd
2 Wh
1 Bk
SEN FB original detection sensor
+5V 10 Bk
LOW when blocked 11 Br
GND 12 Rd
SEN Stage cover sensor